



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/523,633

02/04/2005

Kouichirou Taniguchi

122701

6075

25944

7590

10/04/2007

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

JACKSON, MONIQUE R

ART UNIT

PAPER NUMBER

1773

MAIL DATE

DELIVERY MODE

10/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/523,633

**Applicant(s)**

TANIGUCHI

**Examiner**

Monique R. Jackson

**Art Unit**

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al (USPN 7,033,675.) Taniguchi et al teaches a heat resistant film and metal laminate thereof suitable for electronic parts, comprising a film formed from a mixture of a polyetherimide (PEI) resin and a polyaryletherone resin, preferably PEEK, in a ratio of 30/70 to 70/30; and 5-50 parts of filler based on 100 parts of the PEI/PEEK mixture; wherein Taniguchi et al specifically teach that example PEI resins are the claimed A-1 formula, the claimed A-2 formula, or mixtures of two or more of the PEI resins; and the metal laminate can comprise the heat resistant film laminate with two copper foils as claimed (Abstract; Col. 3, line 32-Col. 5, line 13; Col. 5, line 33-57; Col. 7, line 36-42; Col. 8, line 1-Col. 9, line 3; Example.) Though Taniguchi et al teach that the PEI resin may be the claimed A-1, A-2, or mixtures thereof, Taniguchi et al do not specifically teach that the PEI resin is a mixture of 30/70 to 70/30 of the A-1/A-2 as claimed. However, one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation to determine the optimum amounts of the two PEI resins to utilize, wherein a 50/50 mixture would have been obvious and would fall within the claimed range.

Art Unit: 1773

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-144436 (JP'436.) JP'436 teaches a heat resistant film and metal laminate thereof suitable for electronic parts, comprising a film formed from a mixture of 50-80 parts polyetherimide (PEI) resin and 20-50 parts polyaryleketone resin, preferably PEEK, and 10-70 wt parts of filler based on 100 parts of the PEI/PEEK mixture; wherein JP'436 specifically teaches that example PEI resins are the claimed A-1 formula, the claimed A-2 formula, or mixtures of two or more of the PEI resins; and the metal laminate can comprise the heat resistant film laminate with two copper foils as claimed (Abstract; Paragraphs 0006-0007, 0011, 0018.) Though JP'436 teaches that the PEI resin may be the claimed A-1, A-2, or mixtures thereof, JP'436 does not specifically teach that the PEI resin is a mixture of 30/70 to 70/30 of the A-1/A-2 as claimed. However, one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation to determine the optimum amounts of the two PEI resins to utilize, wherein a 50/50 mixture would have been obvious and would fall within the claimed range.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monique R. Jackson  
Primary Examiner  
Technology Center 1700  
September 30, 2007